

REFINEMENT OPTIONS -- WATER QUALITY

The analysis assumed the dedicated CSO treatment facilities will include high rate clarification and high rate filtration, followed by UV disinfection, to accomplish near-secondary level treatment, as incorporated into the Pre-design reports and estimated costs. The RMR assumed high rate clarification (withouth high rate filtration) followed by disinfection.

The analysis assumed that separated basins will not receive stormwater water quality treatment , consistent with City decision that stormwater management will not be included within the Consent Decree capital program.

Estimated Annual Pollutant Load (1,000 lbs) to Outfall and Environment

Option	BOD	TSS	TP	Cu	Zn	Total
Existing CSO Conditions	4,506	14,491	21.4	3.3	15.2	19,037
Load to Outfall						
Authorized CSO Remedial Plan	484	1,858	2.3	0.4	2.2	2,347
Refinement Option 1 (27% Separation)	627	3,174	3.0	0.6	4.1	3,809
Refinement Option 2 (40% Separation)	556	3,903	3.0	0.7	5.5	4,468
Refinement Option 3 (50% Separation)	588	4,273	3.2	0.8	6.1	4,871
Refinement Option 4 (80% Separation)	882	6,768	5.2	1.1	11.9	7,668
Load to Environment (outfall and river)						
Authorized CSO Remedial Plan	1,041	2,240	5.0	0.7	6.4	3,293
Refinement Option 1 (27% Separation)	1,183	3,491	5.1	0.9	7.3	4,678
Refinement Option 2 (40% Separation)	954	4,151	4.8	1.9	7.9	5,119
Refinement Option 3 (50% Separation)	981	4505	4.9	1.0	8.5	5,500
Refinement Option 4 (80% Separation)	1,285	6,915	8.1	1.3	14.0	8,223

0% Separation (100% tunnel storage / treatment) = same pollutant load as the Authorized CSO remedial plan.